

Notice of Allowability

Application No.

10/723,190

Examiner

Mark Ruthkosky

Applicant(s)

TRAINER ET AL.

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/31/2007.
2. ☒ The allowed claim(s) is/are 12, 14, and 19-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____

MARK RUTHKOSKY
PRIMARY EXAMINER



1-21-2008

DETAILED ACTION

Response to Amendment

This office action is in response to applicant's amendment filed 10/31/2007. The canceled claims include status identifiers showing the claims as canceled, however, the claim text is also presented. The claims are considered canceled based on applicant's remarks. Claims 13 and 15-18 were noted as canceled by applicant in the remarks on page 9.

Claim Rejections - 35 USC § 102/103

The rejection of claims 11, 13, 15, and 17-18 under 35 U.S.C. 102 (b) or in the alternative over 35 U.S.C. 103(a) as being unpatentable over GB 851,202 has been overcome by applicant's amendment to the claims.

The rejection of claims 12-22 under 35 U.S.C. 103(a) as being unpatentable over GB 851,202 in view of Benczur-Urmossy (US 4,039,729) has been overcome by applicant's amendment to the claims.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. The title of the invention was not descriptive. The new title is clearly indicative of the invention to which the claims are directed.

The application has been amended as follows:

Cancel non-elected claims 1-11 and 23-40.

Change the title to, "Method of Adding Electrolyte to a Gap Between the Cathode and Separator of an Alkaline Cell."

Allowable Subject Matter

Claims 12, 14, and 19-22 are allowed.

The following is an examiner's statement of reasons for allowance:

The instant claims are to a method of adding electrolyte solution to an alkaline cell comprising a casing having an open end and opposing closed end and at least one flat surface along its length, comprising:

- (a) inserting cathode material comprising manganese dioxide into the casing so that a cathode surface faces the casing and an opposing exposed cathode surface faces the cell interior;
- (b) inserting a separator into the casing so that a surface of the separator faces said exposed surface of said cathode wherein the separator is of non-electrically conductive material permeable to alkaline electrolyte, wherein said separator has a bag shape and comprises a body surface having an open end and opposing closed end, wherein said body surface defines a cavity for insertion of anode material therein, wherein said separator body surface defining said cavity has an oblong configuration when viewed in cross section along a plane taken perpendicular to the cell's central longitudinal axis, there being a gap between at least a portion of said separator

and the cathode, wherein said gap between said separator and said cathode is between about 2 and 4 mm wide and runs along the length of said separator;

(c) inserting anode slurry material comprising zinc particles into the cavity defined by the body surface of said separator so that the separator is between said anode and cathode;

(d) adding alkaline electrolyte solution comprising aqueous potassium hydroxide directly into said gap, wherein at least a portion of said added electrolyte is absorbed into the anode thereby causing the anode to expand and close said gap between separator and cathode.

The prior art does not teach an alkaline cell, as claimed, or a method of adding electrolyte solution to an alkaline cell having a gap with a width between about 2-4 mm between at least a portion of said separator and the cathode or that the casing is a cuboid shape. The prior art further does not teach adding electrolyte directly to said gap.

The most pertinent prior art has been presented. For example, GB 851,202 teaches a method of adding electrolyte solution to an alkaline cell comprising a casing having an open end and opposing closed end, comprising (a) inserting cathode material into the casing so that a cathode surface faces the casing and an opposing exposed cathode surface faces the cell interior; (b) inserting a separator into the casing so that a surface of the separator faces said exposed surface of said cathode, there being a gap between at least a portion of said separator and the cathode; (c) inserting anode material into said casing so that the separator is between said anode and cathode; (d) adding alkaline electrolyte solution to said gap, wherein at least a portion of said added electrolyte is absorbed into the anode thereby causing the anode to expand and close said gap between separator and cathode. Zinc and manganese dioxide electrode are noted along with a KOH electrolyte. The separator has a bag shape and an oblong configuration.

GB 851,202 does not teach a method of adding electrolyte solution to an alkaline cell having a gap with a width between about 2-4 mm between at least a portion of said separator and the cathode, that the casing is cuboid shaped or adding electrolyte directly to the gap.

Because the prior art does not teach the claimed invention or show the claims would have been obvious to one skilled in the art at the time the invention was made, the claims are allowed. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 571-272-1291. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:30.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Application/Control Number:
10/723,190
Art Unit: 1795

Page 6

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free.)

Mark Ruthkosky
Primary Patent Examiner
Art Unit 1745

MARK RUTHKOSKY
PRIMARY EXAMINER



1.21.2008